

Memorandum

Date: October 31, 2003

To: All Community Water Systems

From: Drinking Water and Environmental Management
P.O. Box 997413
Sacramento, CA 95899-7413

Subject: COMPLIANCE WITH RADIONUCLIDE RULE REVISIONS

On December 7, 2000, EPA adopted revised requirements for radionuclide monitoring that California must adopt to maintain primacy [see Federal Register 65(236), 76708-76753; <http://epa.gov/safewater/rads/radfr.pdf>]. Although the federal revisions take effect on December 8, 2003, initial monitoring does not have to be completed until December 31, 2007.

In June 2002, California's regulation package began the adoption process; it includes all but one of the federal revisions. However, the California Department of Health Services (Department) does not expect the state regulation to be adopted until December 2004 or even later. The draft regulation is posted at <http://www.dhs.ca.gov/ps/ddwem/publications/Regulations/radionuclidesdraftreg8-11-03.pdf>

Purpose of this memo: To inform you regarding the federal rule, identify the differences between the federal and draft California rules, and provide some compliance information.

What's new in the revised federal radionuclide rule?

- All community water systems must conduct separate radium-228 monitoring for one year [The federal objective is to obtain occurrence data; see CFR 141.26(a) and discussion on page 13 of the preamble at URL above];
- Monitoring frequencies will be based on the "standardized monitoring framework of three 3-year periods making up a 9-year compliance cycle, instead of on the existing four-year repeat cycle;
- Reduced monitoring frequencies will be determined by the results of previous monitoring; and
- There will be a federal MCL for uranium of 30 ug/L.

What are the significant differences between the revised federal rule and the draft California rule? There are two, as follows:

| <i>Requirement</i> | <i>Federal Rule</i> | <i>State Draft Rule</i> |
|--|----------------------------|--|
| Uranium MCL | Establishes MCL of 30 ug/L | Retains existing MCL of 20 pCi/L (approximately equivalent to 30 ug/L) |
| Water systems required to monitor for MCL compliance | Community | Community and Nontransient-noncommunity* |

*Not required to conduct separate monitoring for radium-228.

As a community water system, what do I need to do to be in compliance with the new requirements (federal and anticipated state)?

for **Gross Alpha Particle Activity, Radium-226, Radium-228, and Uranium**
Meet the “initial monitoring” requirements, monitoring for radium-228 separately: Analyze and report the results for four consecutive quarterly samples or a composite of four consecutive quarterly samples by December 31, 2007.

- ✓ Historical data (collected between 1/1/01 and 12/31/04 under the draft state rule) may be used to meet this requirement, if approved by the Department.

NOTE:

- You have until December 31, 2007 to complete the one year of required “initial monitoring”;
- There are no changes in the radionuclide MCLs;
- Monitoring can be conducted at either the distribution system entry point or at the source (as designated in your compliance monitoring plan);
- If the first two initial sampling results are below the reporting levels and the sources are not known to be vulnerable to contamination, the Department may waive the final two quarters;
- Radium-228 must be analyzed separately during the initial monitoring period and summed with radium-226 results to determine compliance with the total radium MCL;
- A gross alpha result of 5 pCi/L or less may be used for “screening” [does not apply to radium-228 initial monitoring requirement; see Section 64442(f) in draft regulations]; and
- After initial monitoring requirement met, subsequent monitoring frequency is to be determined by the initial monitoring results [see Section 64442(d) in draft regulations].

for **Beta Particle and Photon Radioactivity**

If the Department notifies you that your system is vulnerable to contamination [see Section 64443(b) and (c) in draft regulations], conduct monitoring according to the Department’s instructions and the draft regulations and determine compliance with the MCLs in Table 64443 in the draft regulations.

If a system would like to use historical data to satisfy the initial monitoring requirement and then follow a reduced monitoring frequency according to the new federal and draft state rules, is that possible before the state rule is adopted?

On a case by case basis, the Department would consider allowing a system to follow the reduced monitoring frequency indicated by its historical data, pursuant to the regulatory requirements.

- ✓ However, note that reduced monitoring and screening do not apply to the initial monitoring requirement for radium-228 which must be met by December 31, 2007.

If you have any questions about the radionuclide rule revisions or this memo, please contact your district field office at _____.

district engineer